

reading the EPL data file for the marked change; and

creating a print file for printing an overlay containing the change.

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2. (amended) A method of managing EPL overlay data as the EPL overlay data changes during operation of an EPL system comprising the steps of:

copying PLU descriptions from a PLU file in the EPL system to a PLU descriptions file;

making a change to the PLU file for an item with an associated EPL;

recording a command to print an overlay;

comparing the PLU descriptions file to the PLU file to determine the change; and

creating a print file for printing an overlay containing the change.

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3. (amended) A method of managing EPL overlay data as the EPL overlay data changes during operation of an EPL system comprising the steps of:

copying a first set of PLU descriptions from a PLU file in the EPL system to a master overlay data file;

copying a first set of EPL data from an EPL data file in the EPL system for a first set of EPLs associated with the first set of PLU descriptions to the master overlay data file;

recording a command to print overlays;

copying a second set of PLU descriptions from the PLU file to a temporary overlay data file;

copying a second set of EPL data from the EPL data file for a second set of EPLs associated with the second set of PLU descriptions to the temporary overlay data file;

comparing the master overlay data file to the temporary overlay data file to determine a third set of PLU descriptions that are different from the first set of PLU descriptions and a third set of EPL data that are different from the first set of EPL data; and

creating a print file for printing overlays containing the third set of PLU descriptions and the third set of EPL data.

4. (amended) A method of managing EPL overlay data as the EPL overlay data changes during operation of an EPL system comprising the steps of:

creating an EPL data file containing PLU descriptions from a PLU file in the EPL system and EPL data;

making a change to the EPL data file;

marking the change;

recording a command to print an overlay;

reading the EPL data file for the marked change; and

creating a print file for printing an overlay containing the change.

5. (amended) A method of managing EPL overlay data as the EPL overlay data changes during operation of an EPL system comprising the steps of:

copying a first set of PLU descriptions associated with a first set of EPLs from a PLU file in the EPL system to a PLU descriptions file;

creating an EPL data file in the EPL system containing EPL data for the first set of EPLs;

determining whether the EPL data file has been changed;

if the EPL data file has been changed, marking the change;

recording a command to print an overlay;

comparing the PLU descriptions file to the PLU file to determine whether the PLU file has been changed;

if the PLU file has been changed, determining a second set of PLU descriptions that are different from the first set of PLU descriptions; and

creating a print file for printing overlays containing the change in the EPL data file and the second set of PLU descriptions.

Amend
6. (amended) A system for managing EPL overlay data as the EPL overlay data changes during operation of an EPL system comprising:

a number of storage media for storing a PLU file and an EPL data file; and
a computer which determines a change in the PLU file or the EPL data file in the EPL system, and which creates a print file for printing an overlay for the change in the PLU file and EPL data file.

Please add the following new claims:

--10. The system of claim 6 wherein the computer operates in conjunction with an overlay data management program which creates a master overlay data file and a temporary overlay data file in addition to said print file.--

--11. The system of claim 10 wherein the master overlay data file includes descriptions of products from the PLU file.--

--12. The system of claim 10 wherein the master overlay data file includes information from within the EPL data file including PLU number, measure, unit of measure, package size, EPL serial number and price level.--

--13. The system of claim 10 wherein the temporary overlay data file includes new and updated descriptions of products from the PLU file and the EPL data file since creation of the master overlay data file.--

--14. The system of claim 13 wherein the print data file contains overlay information for new and updated records and results from a comparison of the master overlay data file with the temporary overlay data file by the overlay data management program.--

--15. The system of claim 6 further comprising an overlay printer which prints an overlay for the print file upon receipt of a print command from the computer.--

--16. The system of claim 6 further comprising an EPL data file manager which marks each EPL record stored in the EPL data file with one or more flags or dirty bits, as each EPL record is added or changed by the EPL data file manager.--

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--17. The system of claim 16 wherein the computer operates in conjunction with an overlay data management program which operates to determine said change in the EPL data file by reading the EPL data file for records marked with one or more flags or dirty bits.--

--18. The system of claim 6 further comprising a storage medium for storing the print file for possible reprinting later.--

--19. The system of claim 16 further comprising user-configurable filters that determine fields defining the dirtiness of a record.--

REMARKS

The present amendment replies to the Official Action mailed March 25, 1998. That action rejected claims 1-9 under 35 U.S.C. 102(e) based upon Kosarew U.S. Patent No. 5,619,416 (Kosarew). This sole ground of rejection is addressed below following a brief discussion of the present invention to provide context.

Claims 1-6 have been amended to be more clear and distinct. New claims 10-19 have been added by amendment. Claims 1-19 are presently pending.

The Present Invention

The present invention relates generally to improvements related to electronic displays, such as electronic price labels (EPLs). More particularly, the present invention relates to advantageous systems and methods for managing EPL overlays as those overlays change during